Application No. 10/042,357

--Illustrated in copending applications U.S. Serial No. 10/042,342, U.S. Serial No. 10/042,356, U.S. Serial No. 10/042,358, U.S. Serial No. 10/042,359, U.S. Serial No. 10/042,360, the disclosures of which are totally incorporated herein by reference, and filed concurrently herewith, all titled "Polythiophenes and Devices Thereof" and all filed January 11, 2002, are polythiophenes and devices thereof. The appropriate components, processes thereof and uses thereof illustrated in these copending applications may be selected for the present invention in embodiments thereof. --

IN THE CLAIMS:

Please cancel Claim 1 without prejudice

Please substitute the amended Claims 2, 3, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, and 27 for pending Claims 2, 3, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, and 27 as follows:

2. (Amended) Polythiophenes of the formula

$$\frac{\left[\left(\left(\begin{array}{c} S \\ \end{array}\right)_{a} \left(\left(\begin{array}{c} S \\ \end{array}\right)_{c} \left(\left(\begin{array}{c} S \\ \end{array}\right)_{c} \left(\left(\begin{array}{c} S \\ \end{array}\right)_{d} \right)_{n} \right. \right.$$

wherein R is a side chain; a is an integer of from about 0 to about 5; b, c, and d are integers of from about 1 to about 5; and n represents the degree of polymerization of from about 5 to about 5,000; the number average molecular weight (M_n) of the polythiophenes is from about 2,000 to about 100,000, and the weight average molecular weight (M_w) is from about 4,000 to about 500,000, each measured by gel permeation chromatography using polystyrene standards, and wherein said polythiophenes possess a conductivity of from about 10^{-6} to about 10^{-9} /S/cm.